Balancing traffic volumes for high quality downtown environments.

Context Sensitive Design for Small Towns

Volume vs. Vitality: Balancing traffic volumes for high quality downtown environments.

By Cascade Design Collaborative Inc.

Copyright 2002

- Economic success for small downtowns depend upon slowing traffic and getting people out of their cars.
- Engineering success, when improving State Routes, is measured by traffic safety, efficient flow and movements as well as cost.
- Our success will be measured by how well we can integrate these two sets of needs.
- How can we improve economic vitality without impacting traffic needs and safety at the local and regional scale?







Balancing traffic volumes for high quality downtown environments.

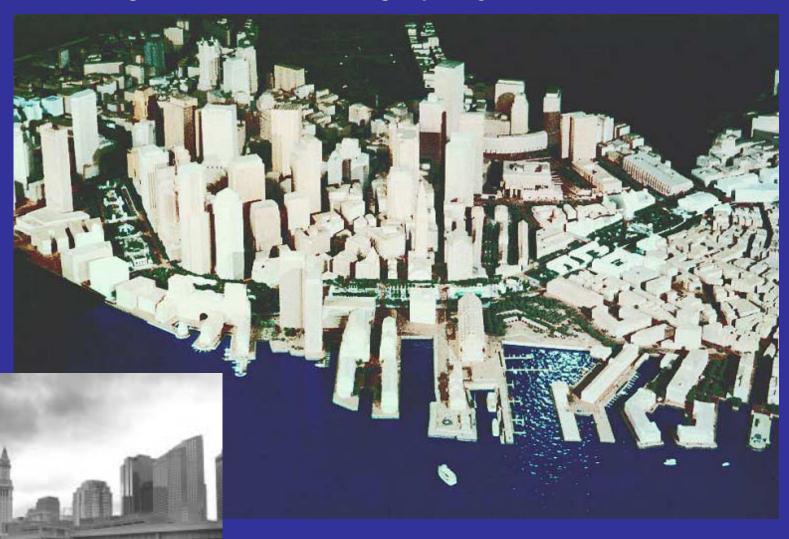
Creating a pedestrian and auto friendly downtown

- Our challenge?
 - Improve the roadway design/function, enhance the community and expand community businesses
- Who are we serving?
 - Local community, the region and tourists
- How can we balance roadway needs with downtown business needs?
 - Visibility safety and for economics
 - Volume #'s and speed
 - Vitality Condition of the built environment, pedestrian and parking

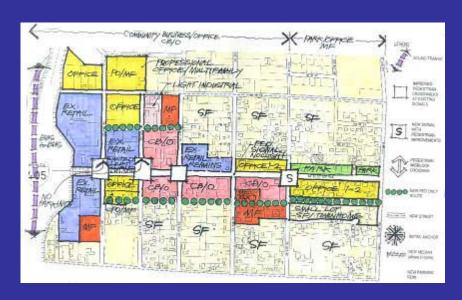




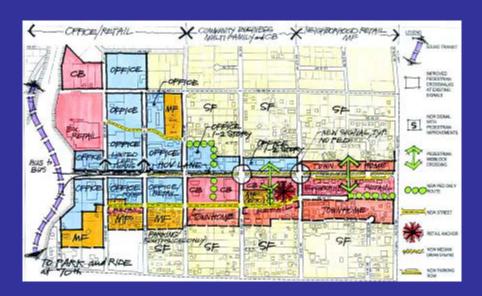




Balancing traffic volumes for high quality downtown environments.



85th Street Kirkland – Alternative A



85th Street Kirkland – Alternative B

Balancing traffic volumes for high quality downtown environments.

Our Challenge

- Create a community, rich in diversity, with easy parking and pedestrian friendly atmosphere
- Calm Traffic but keep it moving
- Design of ROW for full range of traffic and economic factors
- Celebrate the locale history
- Ensure existing businesses and the community survive and thrive
- Expand safety and volume options
- Make the area more inviting and safe for walking and bicycling







Balancing traffic volumes for high quality downtown environments.









CDC copyright 2002







Balancing traffic volumes for high quality downtown environments.

Who will be served

- We will be able to safely walk (shop) along and cross roadways
- We will be able to see store frontage/signs and parking opportunities
- Regional pass-by trips will be encouraged to stop and shop
- We will continue to support the larger regional linkages and connections beyond the downtown.
- We will have new small-scale retail and commercial activities that complement existing businesses and respond to the roadway design and demands.







Balancing traffic volumes for high quality downtown environments.

The Design Criteria for balancing needs

(planning principles and concepts, new land uses, zoning, roadway and pedestrian improvements)

The Criteria or characteristics for successful state (shopping streets) routes:

- Speed kills retail Reduce 45 MPH to 35 and 25 MPH
- Balance ROW width and # of Lanes with Sidewalk width
- Parking location on vs. off street
- 1- way vs. 2- way street layout
- Signage location and size both street & advertising
- Parking on street vs. off street
- Sidewalk dimension, scale and amenities
- Traffic controls and calming options
- Uses along street frontage dimension, scale and setback
- Land Uses and Density within ¼ mile radius of the downtown

Volume vs. Vitality: Balancing traffic volumes for high quality downtown environments.

Variables for Vitality

Setback	<15'	<25'	<40'
Lane	1	1-2	2
Control	Roundabout	Roundabout sign	Signal
Visual	12' clear	15' clear	Grouping of trees
Parking	Angle	Parallel	Off -Street
Speed	25 mph	35 mph	45 mph
Trips ave/hr	<400	400-800	800-1200

Visibility (lower speed) + Volume = Vitality

Balancing traffic volumes for high quality downtown environments.

<u>Concept #1</u> Create a New Public Realm – Find Benefits.

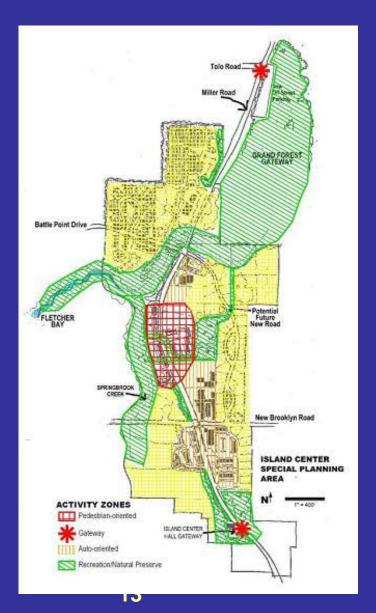
- Activate the local community to integrate their needs with the larger roadway program.
- <u>E</u>valuate each design elements
- Identify a range of options and test
- Observe the context as each place is unique
- <u>Understand the limits of the ROW</u> and the demands











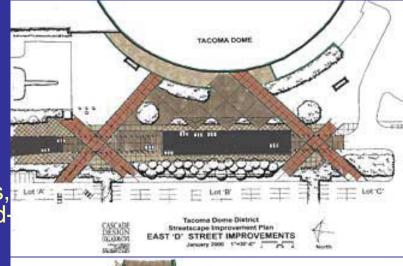
Balancing traffic volumes for high quality downtown environments.

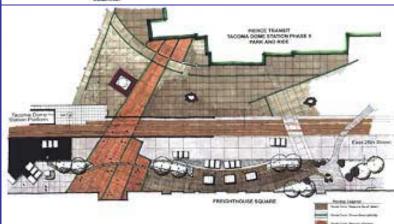
Concept #2

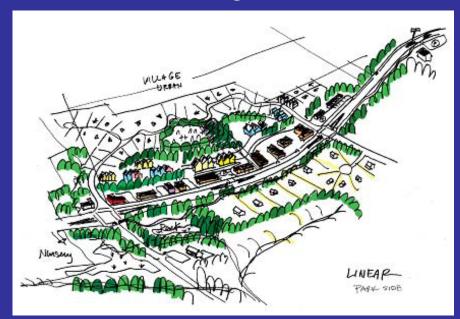
Transform ROW. to a safe & scenic corridor.

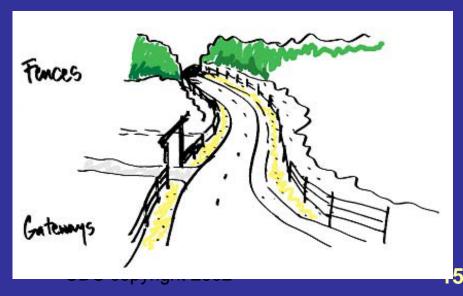
Implement innovative 3-R's

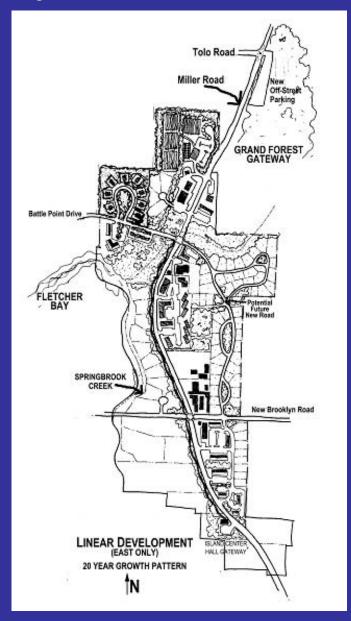
- 1 Routes of travel,
- 2 Roadway design and
- 3 ROW design of curb line
- and create
 - sidewalk with amenities, bicycle lanes, trails, planted islands and/or full roundabouts, and limit full stops
 - Options for 1-way, 2-way or by-pass
 - gateways to slow traffic and identify area and
 - large scale art/artifact icons for local businesses, wayfinding and as historical markers











Balancing traffic volumes for high quality downtown environments.

Concept #3

If needed define two parallel universes - the thru-auto and local-auto/pedestrian

- Minimize existing and future conflicts between regional needs and local needs via new parallel roadways
- Maintain regional needs with good visibility and access to local streets
- Create parallel corridors for pedestrian and auto insuring sufficient use for retail success.
- Identify specific pedestrian crossings and linkages





Balancing traffic volumes for high quality downtown environments.

Concept #4

Create a pedestrian oriented downtown and a transportation corridor together.



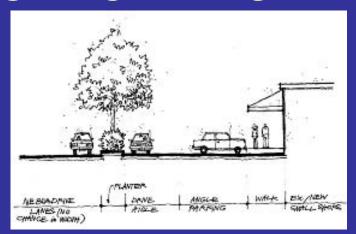


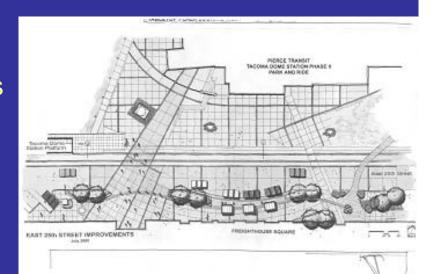


Balancing traffic volumes for high quality downtown environments.

Concept #5 Demand innovative design/engineering

- Blend local and state design requirements to achieve increased opportunities
- Create new off arterial roadway for commercial business options where demand warrants
- Visibility easy access and amenities,
- Preserve sense of the local condition while integrating state design elements
- Promote a mix of pedestrian and automobile design elements.





Balancing traffic volumes for high quality downtown environments.

Amending the Design Manual for specific conditions



- Collaborate about our future begin planting the seeds of change today
- Celebrate our past preserve its treasures
- Create artifacts / art elements for and about this place, its businesses and its community spirit
- Define through zoning development options linked to public benefits
- Construct memorable buildings and sites CDC copyright 2002

